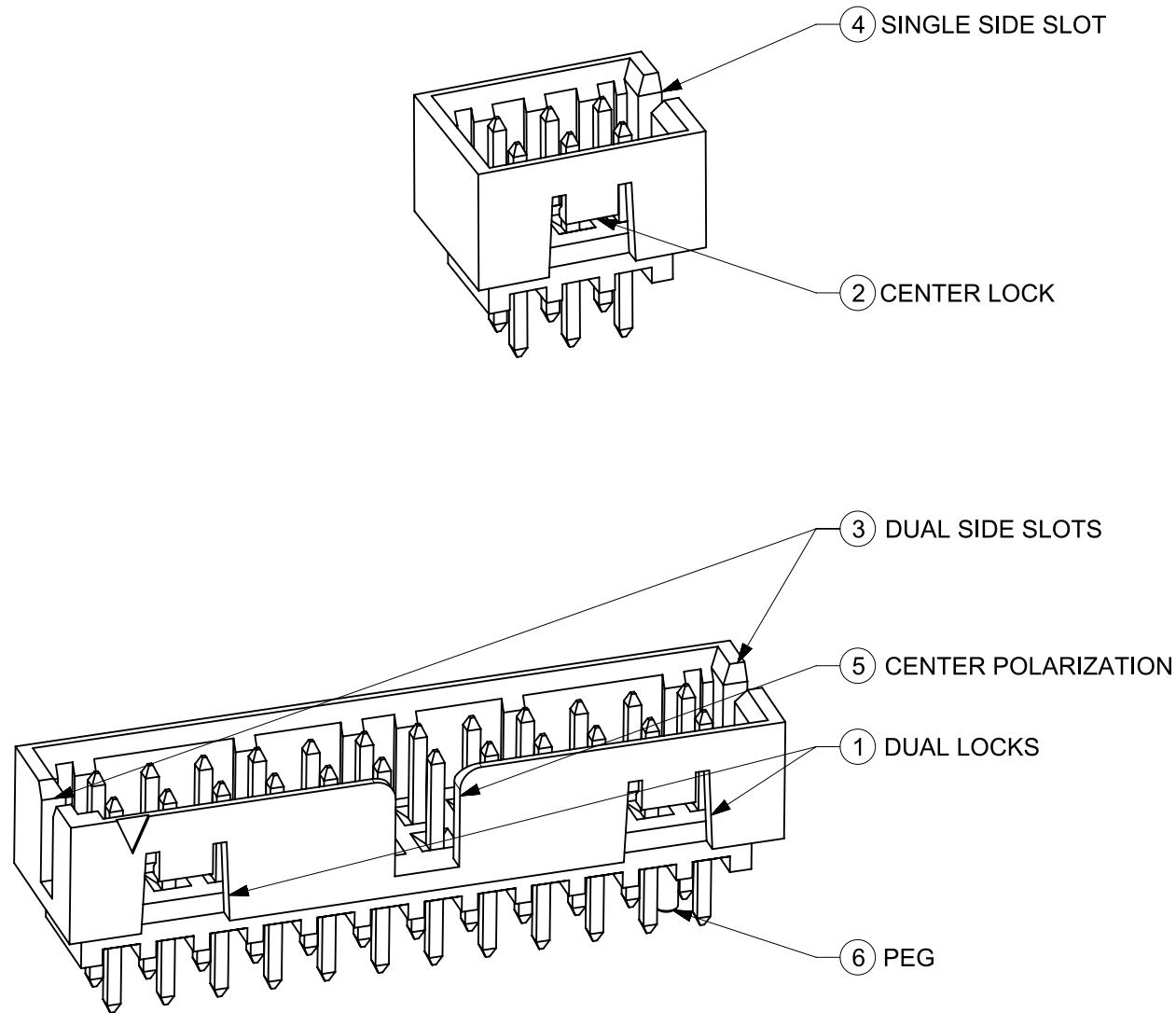


FEATURES SELECTION GUIDE



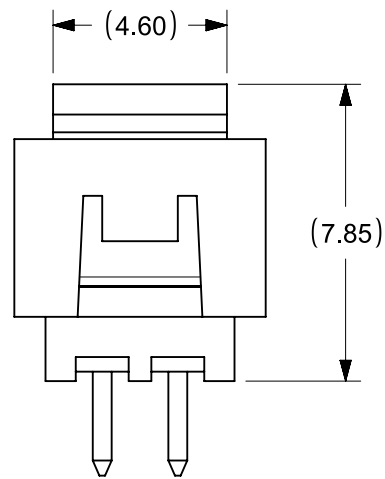
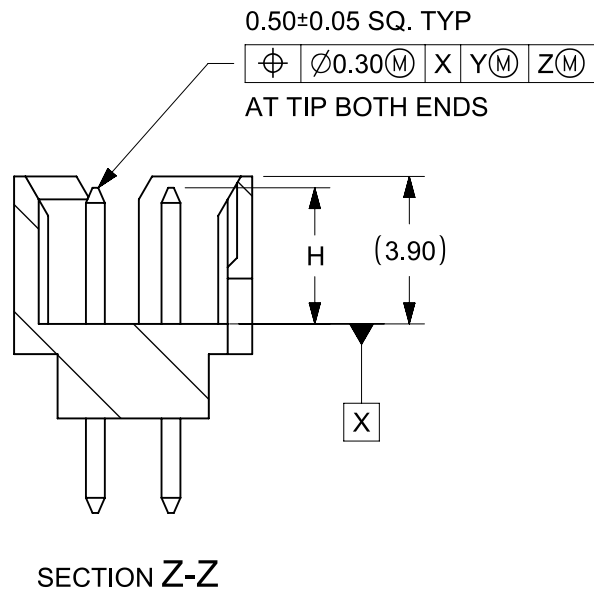
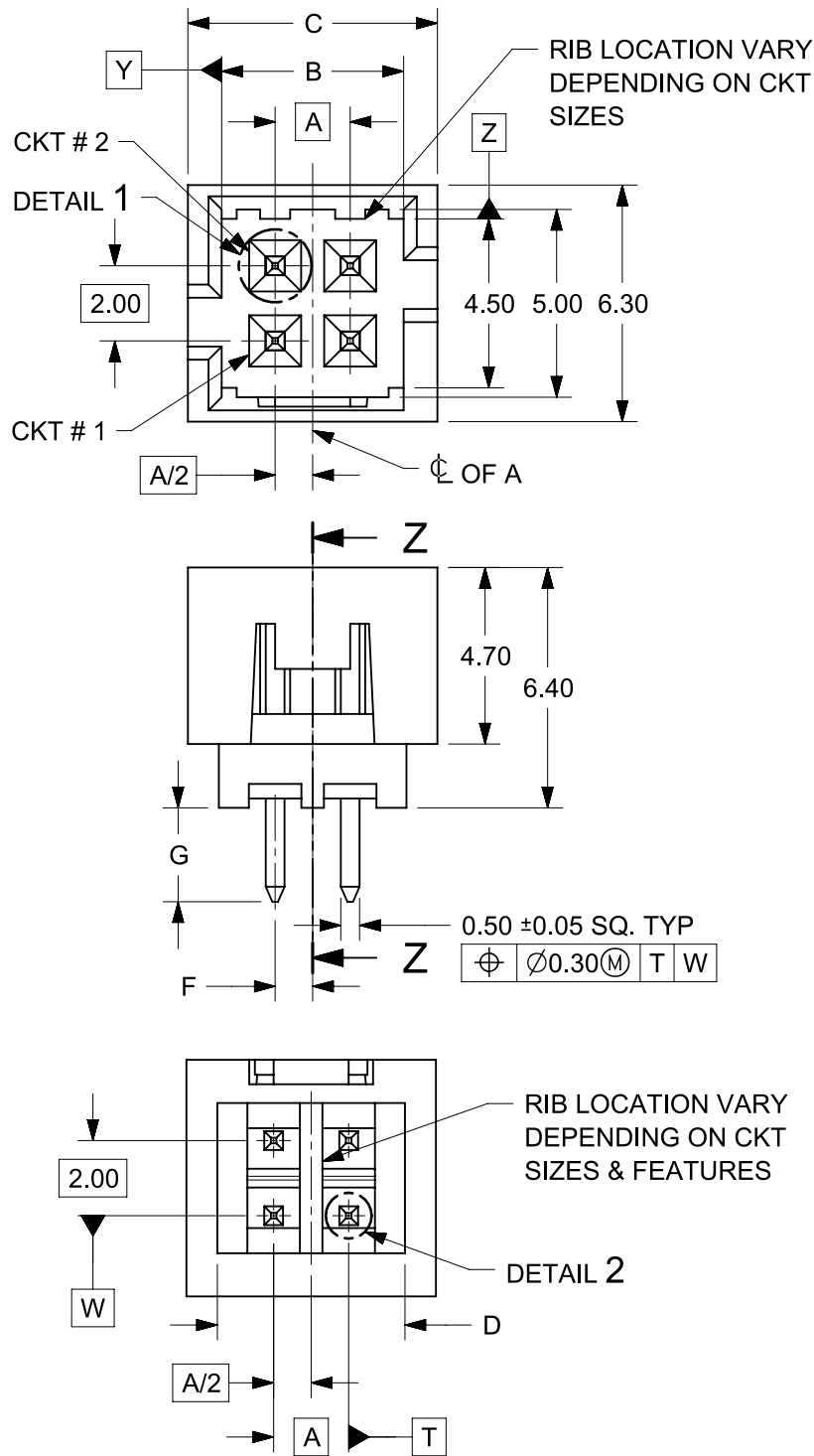
PACKAGING SPECIFICATION TABLE

TAPE AND REEL PACKAGING	PK-87831-300
TUBE STANDARD PACKAGING	PK-87831-001
TUBE NON-STANDARD PACKAGING FOR:	PK-87831-002
87831-0419 87831-0645	
87831-5141 87831-5119	
87831-0443 87831-1011	
87831-5241 87831-1420	
87831-5242	
87831-0643	

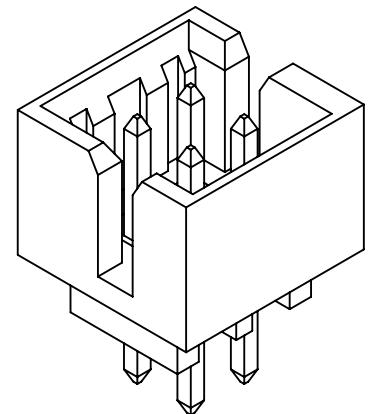
CIRCUIT SIZE		FEATURES						
		FRICTION LOCKS		SIDE SLOTS		⑤ CENTER POLARIZATION	⑥ PEG	SHEET NO
		① DUAL	② CENTER	③ DUAL	④ SINGLE			
4	N.A	N.A	YES	N.A	N.A	N.A	2 - 3	
	N.A	YES	YES	N.A	N.A	N.A		
	N.A	YES	N.A	YES	N.A	N.A		
6	N.A	N.A	YES	N.A	N.A	N.A	4 - 5	
	N.A	N.A	YES	N.A	N.A	YES		
	N.A	YES	YES	N.A	N.A	N.A		
	N.A	YES	YES	N.A	N.A	YES		
	N.A	YES	N.A	YES	N.A	N.A		
	N.A	YES	N.A	YES	N.A	YES		
	N.A	N.A	YES	N.A	YES	N.A		
8 TO 12	N.A	N.A	YES	N.A	YES	N.A	6 - 8	
	N.A	N.A	YES	N.A	YES	YES		
	N.A	YES	YES	N.A	N.A	N.A		
	N.A	YES	YES	N.A	N.A	YES		
	N.A	YES	N.A	YES	N.A	N.A		
	N.A	YES	N.A	YES	N.A	YES		
14 TO 50	YES	N.A	YES	N.A	YES	N.A	9 - 13	
	YES	N.A	YES	N.A	YES	YES		

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex								
mm		NTS														
GENERAL TOLERANCES (UNLESS SPECIFIED)								MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER								
	MM	INCH	EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				PRODUCT CUSTOMER DRAWING		DOCUMENT NUMBER SD-87831-0001		DOC TYPE PSD	DOC PART 001	REVISION A25			
4 PLACES	± 0	± 0														
3 PLACES	± 0	± 0														
2 PLACES	± 0.2	± 0														
1 PLACE	± 0	± 0														
0 PLACES	± 0	± 0														
ANGULAR TOL ± 3 °			THIRD ANGLE PROJECTION				DRAWING A3-SIZE		SERIES 87831		MATERIAL NUMBER SEE TABLE		CUSTOMER GENERAL MARKET		SHEET NUMBER 1 OF 14	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS																

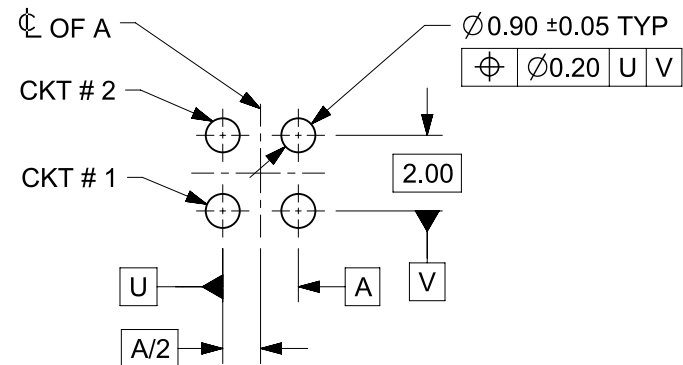
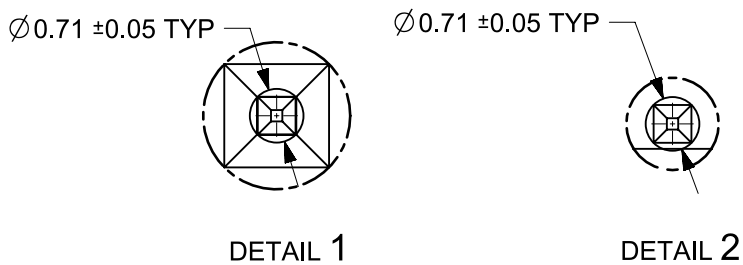
4 CIRCUITS



VIEW FOR
HEADER WITH CAP

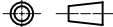


VIEW FOR HEADER
WITH ONLY DUAL SLOTS



RECOMMENDED PCB LAYOUT

- NOTES:
1. MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ. PHOSPHOR BRONZE
 2. FINISHES: REFER TO PLATING OPTIONS
 3. PRODUCT SPECIFICATION: PS-87831-027
 4. PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 5. MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES
AND CRIMP TERMINAL: 50394 SERIES
B. MOLEX 2mm MILLIGRID DUAL ROW IDT: 87568 SERIES
C. MOLEX 2mm MILLIGRID DUAL ROW RECEPTACLE:
79107 (GOLD PLATED), 78787 (TIN PLATED)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER											
mm		NTS																	
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026				PRODUCT CUSTOMER DRAWING											
	MM		INCH																
4 PLACES	±	0	±									0							
3 PLACES	±	0	±									0							
2 PLACES	±	0.2	±									0							
1 PLACE	±	0	±									0							
0 PLACES		±	0	±	0	INITIAL REVISION:				DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION			
		ANGULAR TOL		±	3 °	DRWN: GMENARLY 2015/04/15		2015/06/29		SD-87831-0001				PSD		001		A25	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER					
						A3-SIZE		87831		SEE TABLE		GENERAL MARKET		2 OF 14					

10	9	8	7	6	5	4	3	2	1									
4 CIRCUITS																		
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION							
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H
4	87831-0419	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	2.00	4.85	6.65	5.00	N.A	N.A	2.50	3.60±0.20
	87831-0420	N.A	N.A	2														
	87831-0421	N.A	N.A	3														
	87831-0436	N.A	N.A	4														
	87831-0441	87831-0456	N.A	2	N.A	YES	YES	N.A	N.A	N.A						1.00	2.50	
	87831-0442	N.A	87831-5565	3														
	87831-5141	N.A	N.A	2	N.A	YES	YES	N.A	N.A	3.50								
	87831-5142	N.A	N.A	3														
	87831-6141	N.A	N.A	2	N.A	YES	YES	N.A	N.A							2.80		
	87831-6142	N.A	N.A	3														
	87831-0443	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A							2.50	
	87831-0444	N.A	N.A	3														

PLATING OPTIONS:

1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

2 - 0.38µm/15µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

3 - 0.76µm/30µin GOLD IN CONTACT AREA AND
1.88µm/75µin MIN. MATTETIN IN SOLDER TAIL AREA OVER
1.27µm/50µin MIN. NICKEL OVERALL.

4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	MM	INCH
4 PLACES	± 0	± 0
3 PLACES	± 0	± 0
2 PLACES	± 0.2	± 0
1 PLACE	± 0	± 0
0 PLACES	± 0	± 0
ANGULAR TOL	± 3 °	

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

87831

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A25

PRODUCT CUSTOMER DRAWING

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

3 OF 14

DOCUMENT STATUS

Production

RELEASE DATE

08-Jun-2026

04:36:51

9

8

7

6

5

4

3

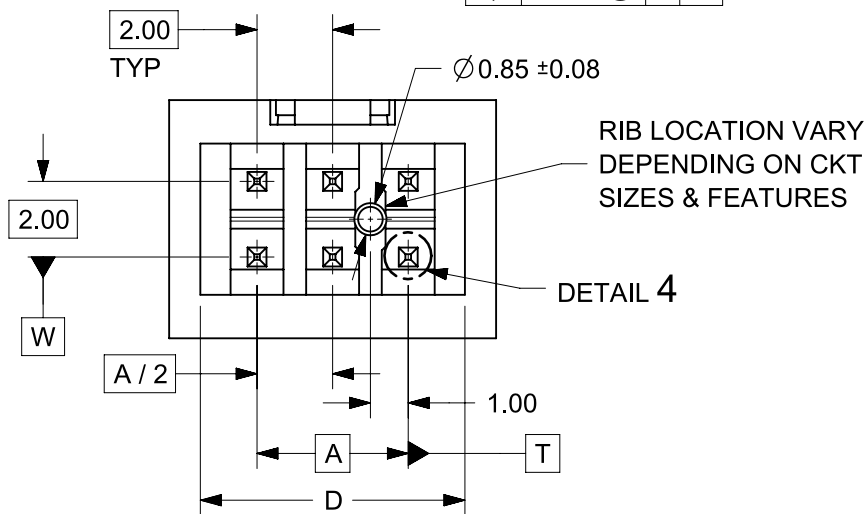
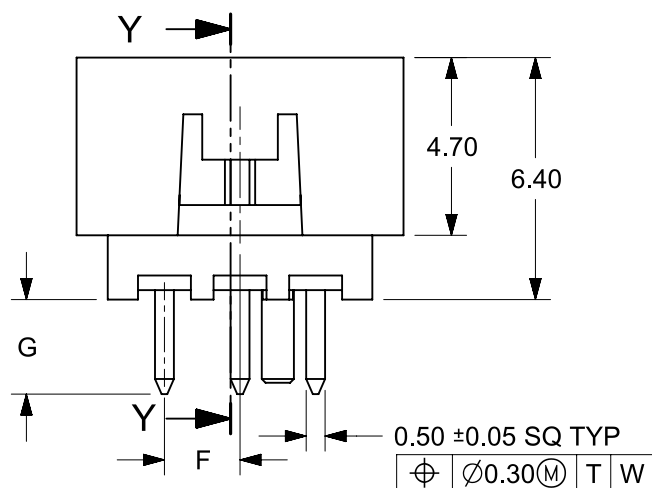
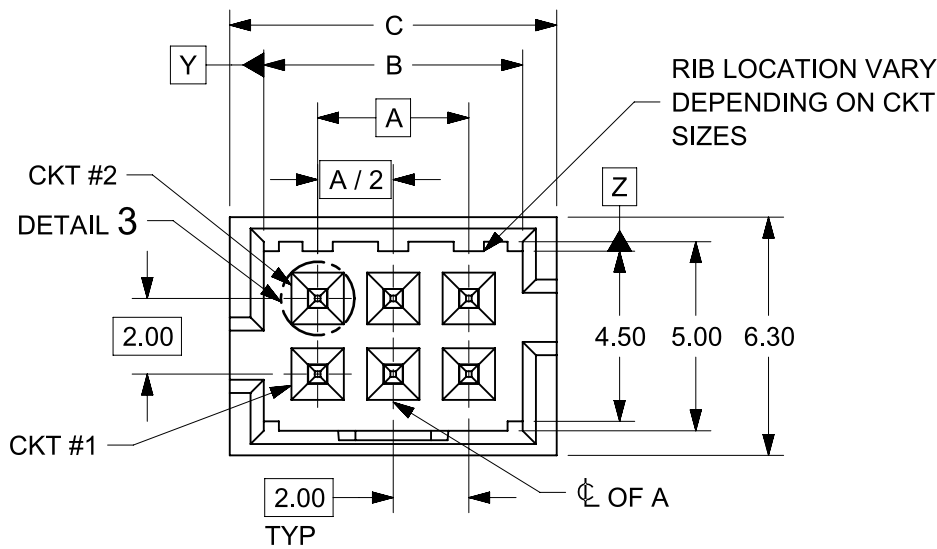
2

1

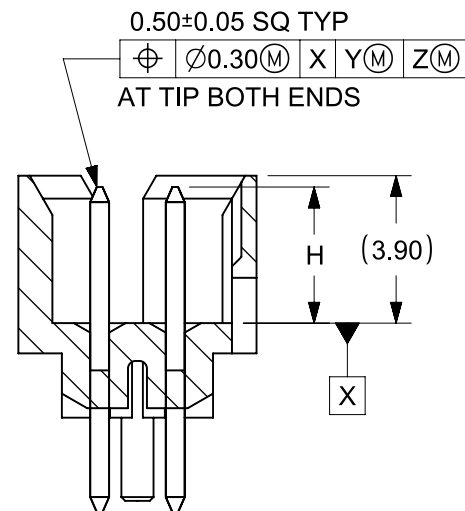
FORMAT: Molex-kgm-master-ib-prod-A3

REVISION: E1

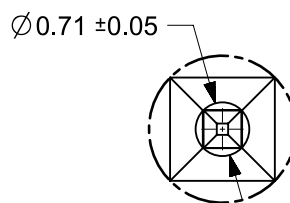
DATE: 2021/05/01



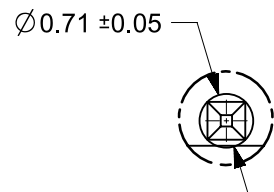
6 CIRCUITS



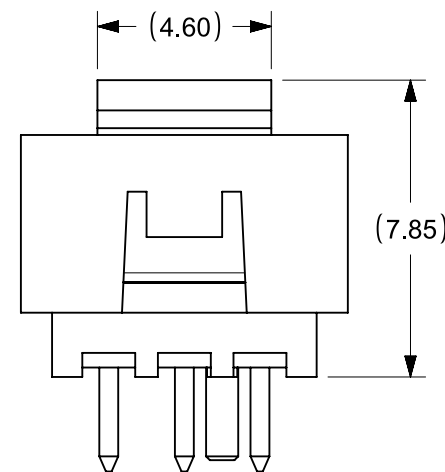
SECTION Y-Y



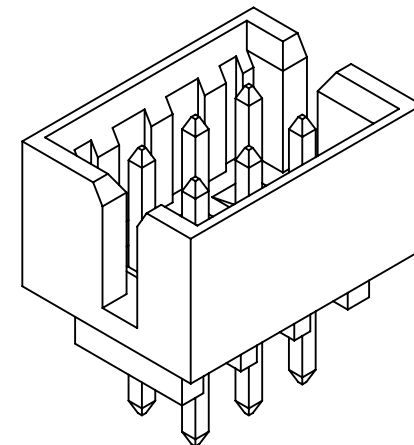
DETAIL 3



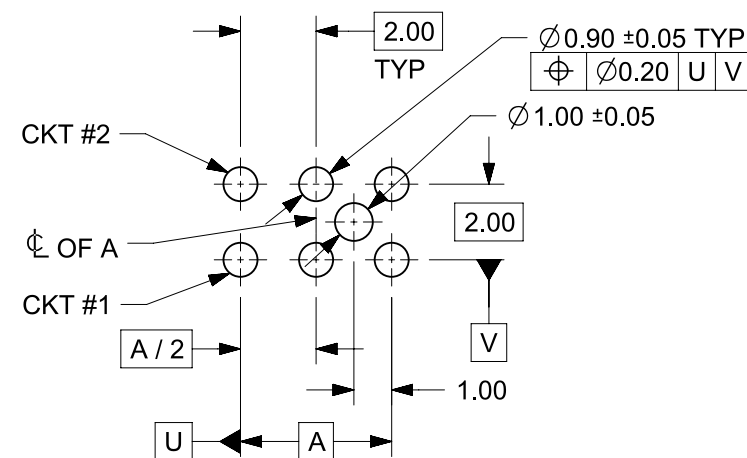
DETAIL 4



VIEW FOR
HEADER WITH CAP



VIEW FOR HEADER WITH
ONLY DUAL SLOTS



RECOMMENDED PCB LAYOUT

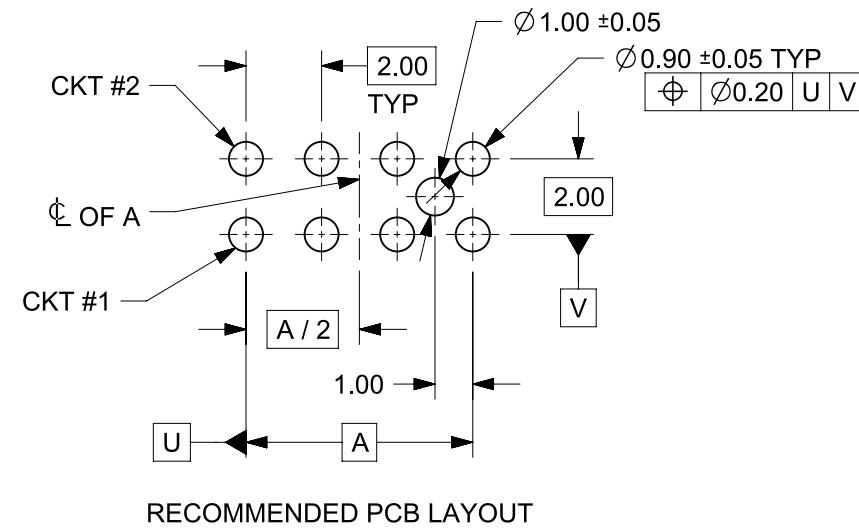
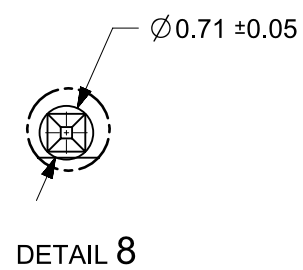
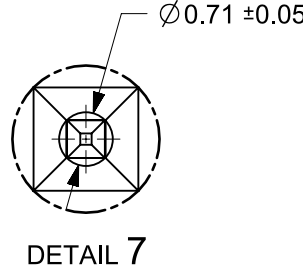
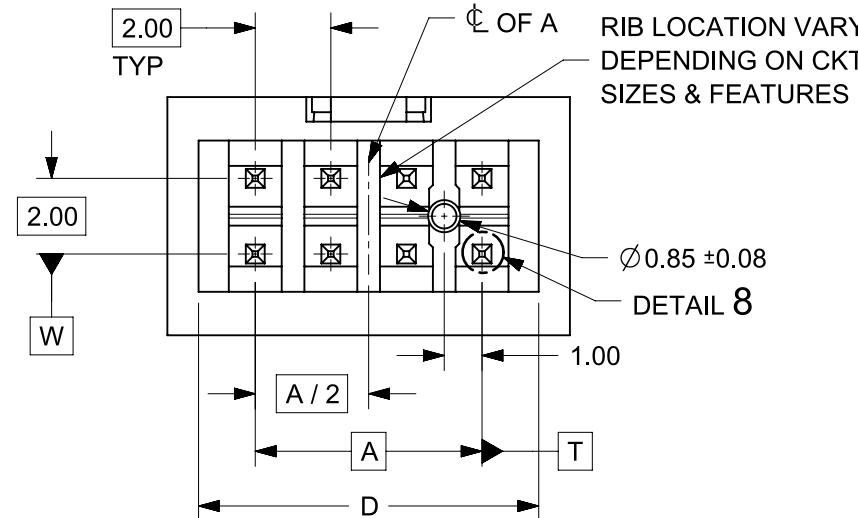
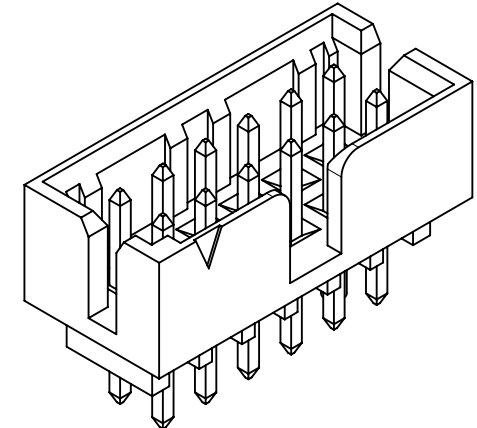
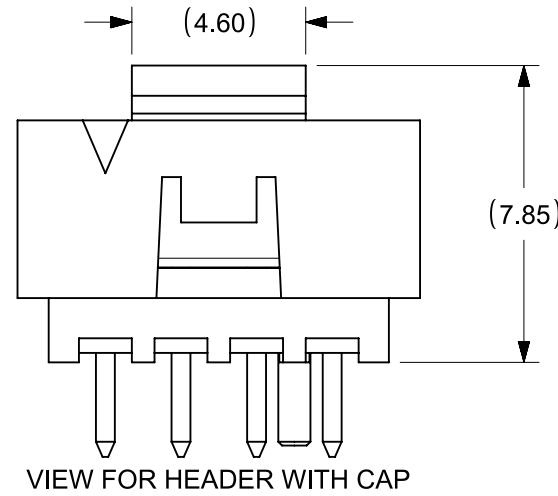
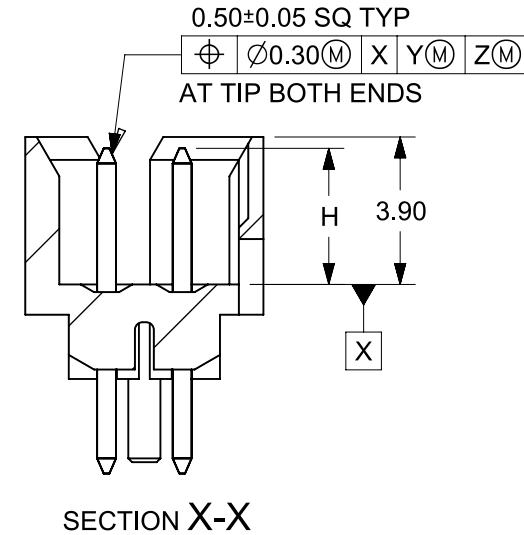
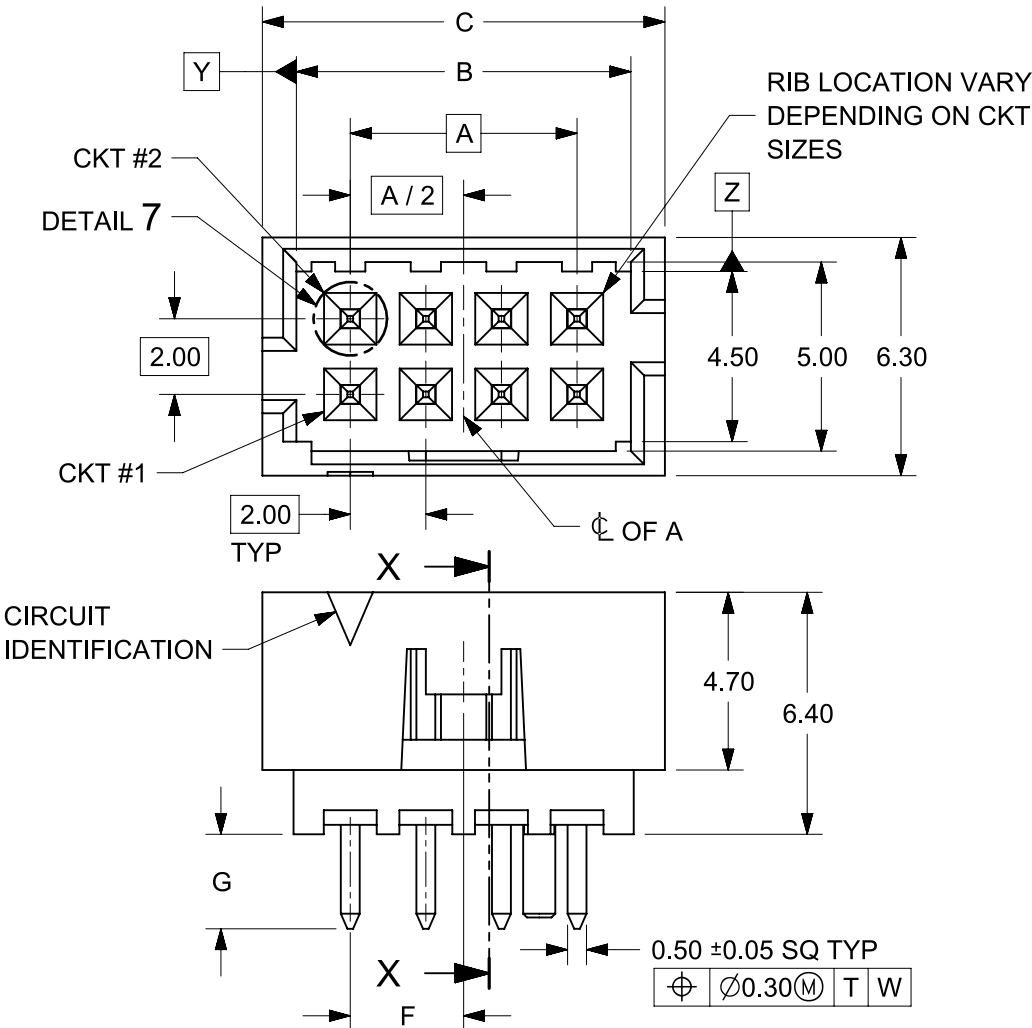
NOTES:

- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
- FINISHES: REFER TO PLATING OPTIONS
- PRODUCT SPECIFICATION: PS-87831-027
- PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
- MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES
B. MOLEX 2mm MILLIGRID DUAL ROW IDT: 87568 SERIES
C. MOLEX 2mm MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

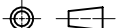
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex							
mm		NTS													
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026 INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29											
	MM	INCH													
4 PLACES	± 0	± 0													
3 PLACES	± 0	± 0													
2 PLACES	± 0.2	± 0													
1 PLACE	± 0	± 0													
0 PLACES	± 0	± 0		PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER SD-87831-0001 DOC TYPE PSD DOC PART 001 REVISION A25											
ANGULAR TOL ± 3 °															
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
						A3-SIZE		87831		SEE TABLE		GENERAL MARKET		4 OF 14	

10	9	8	7	6	5	4	3	2	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
6 CIRCUITS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
F	CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
E	6	87831-0619	N.A	N.A	1	N.A	N.A	YES	N.A	N.A	N.A	4.00	6.85	8.65	7.00	N.A	N.A	2.50	3.60±0.20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
		87831-0620	N.A	N.A	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		87831-0621	N.A	N.A	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		87831-0636	N.A	N.A	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
D	6	87831-0628	N.A	N.A	2	N.A	N.A	YES	N.A	N.A	YES						N.A	6.85		8.65	7.00	N.A	N.A	2.50	3.60±0.20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
		87831-0629	N.A	N.A	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		87831-0641	N.A	87831-0647	2	N.A	YES	YES	N.A	N.A	N.A															N.A	6.85	8.65	7.00	N.A	2.00	2.50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		87831-0642	N.A	87831-5552	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
C	6	87831-5241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	6.85		8.65	7.00	N.A	2.00	2.50									3.60±0.20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
		87831-5242	N.A	N.A	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		87831-6241	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A								N.A							6.85	8.65	7.00	N.A	2.00	2.80																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		87831-6242	N.A	N.A	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
B	6	87831-0643	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						N.A	6.85		8.65	7.00	N.A	2.00	2.50								3.60±0.20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		87831-0644	N.A	N.A	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		87831-0645	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A								N.A						6.85	8.65	7.00	N.A	2.00	2.50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		87831-0646	N.A	N.A	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
A	6	87831-0632	N.A	N.A	2	N.A	YES	YES	N.A	N.A	YES						N.A	6.85		8.65	7.00	N.A	2.00	2.50							3.60±0.20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		87831-5119	N.A	N.A	1	N.A	N.A	YES	N.A	YES	N.A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
		87831-5121	N.A	N.A	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		87831-5136	N.A	N.A	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
PLATING OPTIONS:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
DOCUMENT STATUS										Production	RELEASE DATE	08-Jun-2026	04:36:51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
9										8										7										6										5										4										3										2										1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
FORMAT: Molex-aga-master-ib-prod-A3										REVISION: E1										DATE: 2021/05/01																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

8 TO 12 CIRCUITS



- NOTES:
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
 - FINISHES: REFER TO PLATING OPTIONS
 - PRODUCT SPECIFICATION: PS-87831-027
 - PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 - MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES
B. MOLEX 2mm MILLIGRID DUAL ROW IDT: 87568 SERIES
C. MOLEX 2mm MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				mo lex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				
mm	NTS											
GENERAL TOLERANCES (UNLESS SPECIFIED)												
	MM	INCH		PRODUCT CUSTOMER DRAWING								
4 PLACES	± 0	± 0	± 0									
3 PLACES	± 0	± 0	± 0									
2 PLACES	± 0.2	± 0	± 0									
1 PLACE	± 0	± 0	± 0									
0 PLACES	± 0	± 0	± 0	INITIAL REVISION:				DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
DRAWN: MGENARLY				2015/04/15		SD-87831-0001		PSD	001	A25		
APPR: KHLIM				2015/06/29								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
				A3-SIZE		87831	SEE TABLE		GENERAL MARKET		6 OF 14	

10	9	8	7	6	5	4	3	2	1															
8 CIRCUITS																								
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION													
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H						
8	87831-0819	N.A	N.A	1	N.A	N.A	YES	N.A	YES	N.A	6.00	8.85	10.65	9.00	N.A	N.A	2.50	3.60±0.20						
	87831-0820	N.A	N.A	2																				
	87831-0821	N.A	N.A	3																				
	87831-0836	N.A	N.A	4																				
	87831-0828	N.A	N.A	2	N.A	N.A	YES	N.A	YES	YES						N.A	YES		N.A	YES	N.A	N.A	2.50	
	87831-0829	N.A	N.A	3																				
	87831-0841	N.A	87831-5551	2																				
	87831-0842	N.A	N.A	3	N.A	YES	YES	N.A	N.A	YES						N.A	N.A		YES	N.A	3.00			2.50
	87831-5841	N.A	N.A	2																				
	87831-5441	N.A	N.A	2																				
	87831-5442	N.A	N.A	3	N.A	YES	YES	N.A	N.A	N.A						N.A	YES		N.A	N.A		YES	N.A	
	87831-5541	N.A	N.A	2																				
	87831-5542	N.A	N.A	3																				
	87831-5741	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	N.A	N.A	N.A	N.A	2.80
	87831-0832	N.A	N.A	2	N.A	YES	YES	N.A	N.A	N.A						N.A	N.A		N.A	N.A	N.A	N.A	N.A	4.70
	87831-0843	N.A	N.A	2	N.A	YES	N.A	YES	N.A	N.A						N.A	YES		N.A	N.A	N.A	N.A	N.A	2.50
	87831-0844	N.A	N.A	3																				
	87831-0845	N.A	N.A	2																				
87831-0846	N.A	N.A	3	N.A	YES	N.A	YES	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	2.50							

PLATING OPTIONS:

1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.

2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.

3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.

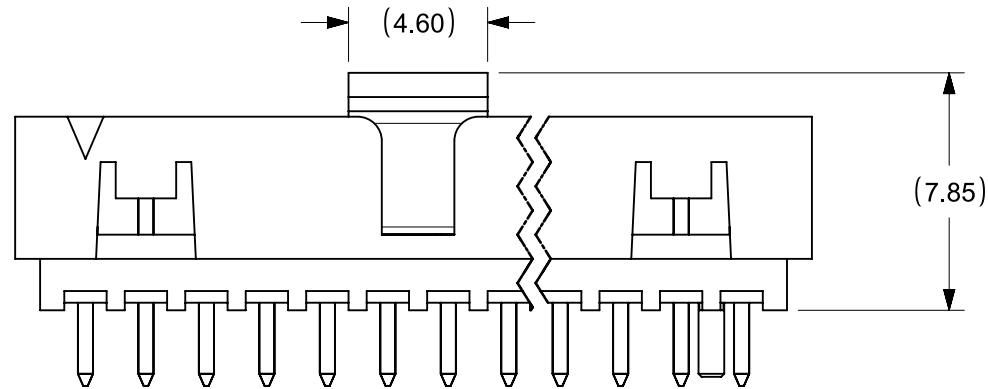
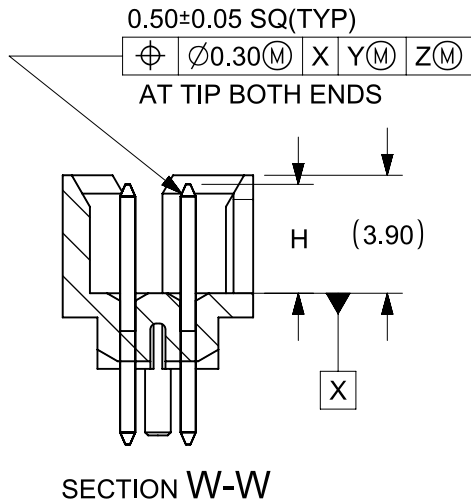
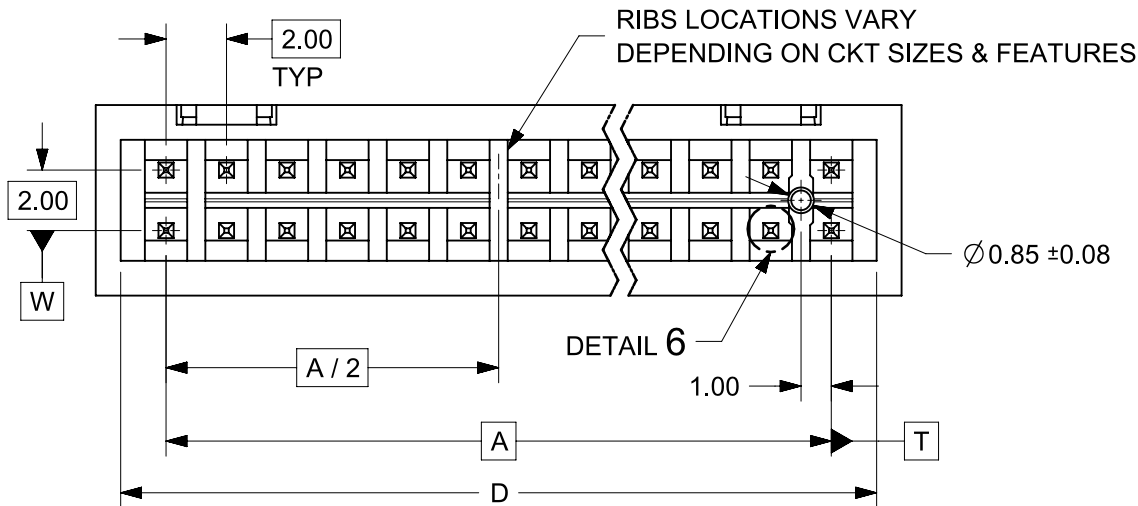
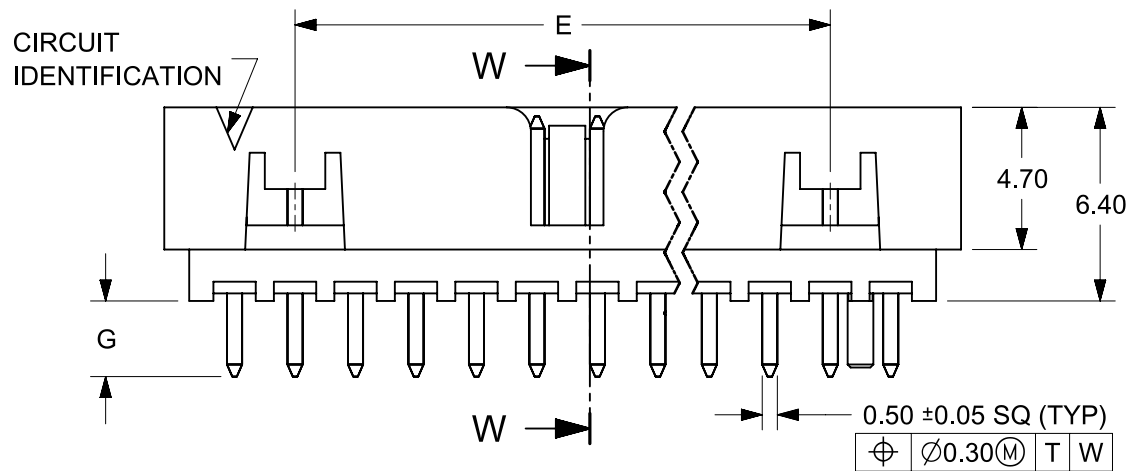
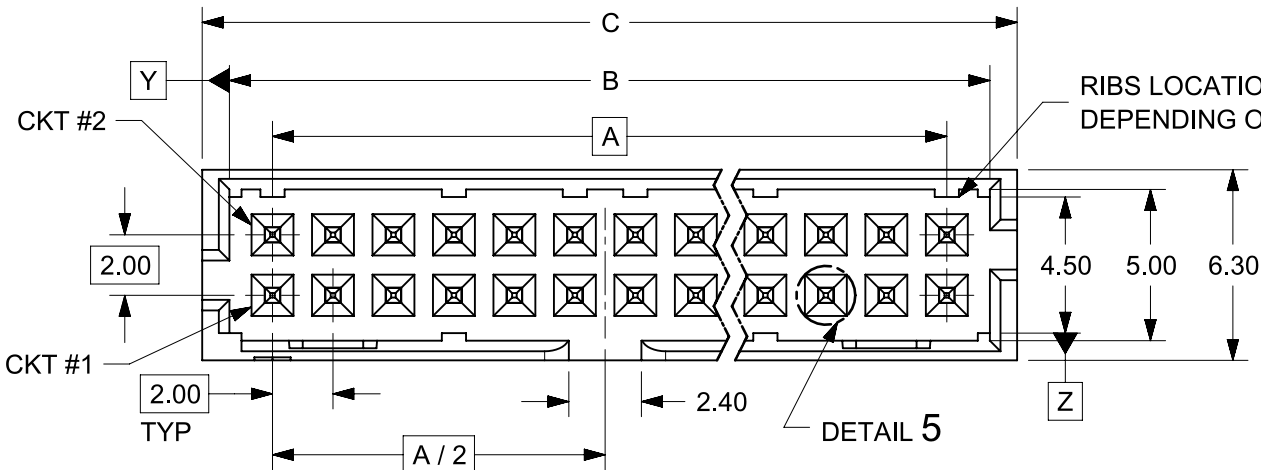
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION														
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				mo MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER						
mm		NTS												
GENERAL TOLERANCES (UNLESS SPECIFIED)				PRODUCT CUSTOMER DRAWING										
		MM	INCH	EC NO: CO-000042098				DOCUMENT NUMBER				DOC TYPE	DOC PART	REVISION
4 PLACES	± 0	± 0	± 0	DRWN: Meghraj Boodagatti 22-Apr-2026				SD-87831-0001				PSD	001	A25
3 PLACES	± 0	± 0	± 0	CHK'D: Meghraj Boodagatti 08-Jun-2026										
2 PLACES	± 0.2	± 0	± 0	APPR: Saravanakumar Murugesan 08-Jun-2026										
1 PLACE	± 0	± 0	± 0	INITIAL REVISION:										
0 PLACES	± 0	± 0	± 0	DRWN: GMENARLY 2015/04/15										
ANGULAR TOL ± 3 °				APPR: KHLIM 2015/06/29										
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER		
						A3-SIZE	87831	SEE TABLE		GENERAL MARKET		7 OF 14		

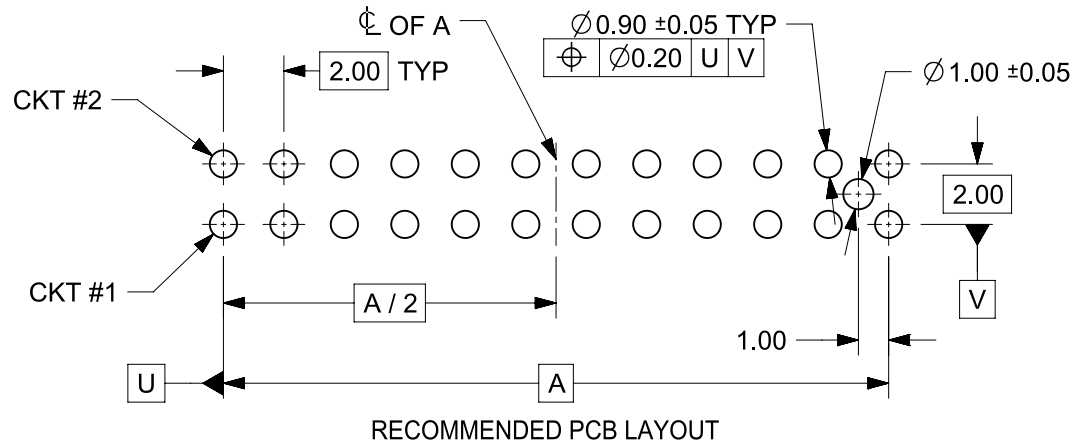
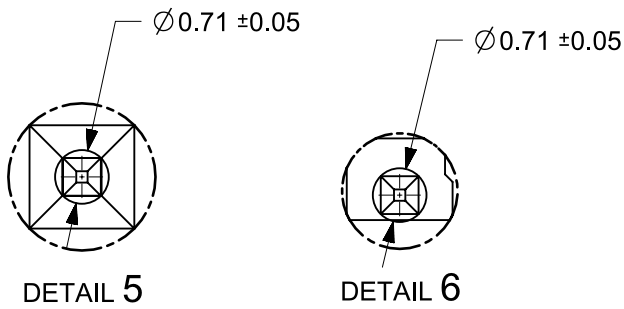
DOCUMENT STATUS	Production	RELEASE DATE	08-Jun-2026	04:36:51				
9	8	7	6	5	4	3	2	1

10	9	8	7	6	5	4	3	2	1																
10 TO 12 CIRCUITS																									
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		#####	PEG	DIMENSION													
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H						
10	87831-1019	N.A	N.A		1	N.A	N.A	YES	N.A	YES	N.A	8.00	10.85	12.65	11.00	N.A	N.A	2.50	3.60±0.20						
	87831-1020	N.A	87831-1070		2																				
	87831-1021	N.A	87831-5562		3																				
	87831-1036	N.A	N.A		4																				
	87831-1010	87831-1030	87831-5561		2	N.A	N.A	YES	N.A	YES	N.A														
	87831-1011	N.A	N.A		3																				
	87831-1028	N.A	N.A		2	N.A	N.A	YES	N.A	YES	YES														
	87831-1029	N.A	87831-5557		3																				
	87831-1035	N.A	N.A		3	N.A	N.A	YES	N.A	YES	YES														
	87831-1041	N.A	N.A		2																				
	87831-1042	N.A	87831-5553		3	N.A	YES	YES	N.A	N.A	N.A														
	87831-1032	N.A	N.A		2																				
	87831-1043	N.A	N.A		2	N.A	YES	N.A	YES	N.A	N.A														
	87831-1044	N.A	N.A		3																				
	87831-1045	N.A	N.A		2	N.A	YES	N.A	YES	N.A	YES														
	87831-1046	N.A	N.A		3																				
12	87831-1219	N.A	N.A		1	N.A	N.A	YES	N.A	YES	N.A	10.00	12.85	14.65	13.00	N.A	N.A	2.50	3.60±0.20						
	87831-1220	N.A	87831-5556		2																				
	87831-1221	N.A	N.A		3																				
	87831-1236	N.A	N.A		4																				
	87831-1228	N.A	N.A		2	N.A	N.A	YES	N.A	YES	YES														
	87831-1229	N.A	87831-5558		3																				
	87831-1258	N.A	87831-5567		2																				
	87831-1241	N.A	N.A		2	N.A	YES	YES	N.A	N.A	N.A														
	87831-1242	N.A	N.A		3																				
	87831-1255	87831-1256	N.A		2	N.A	YES	YES	N.A	N.A	N.A														
	87831-1232	N.A	N.A		2																				
	87831-1243	N.A	N.A		2	N.A	YES	N.A	YES	N.A	N.A														
	87831-1244	N.A	N.A		3																				
	87831-1245	N.A	N.A		2	N.A	YES	N.A	YES	N.A	YES														
	87831-1246	N.A	N.A		3																				
	PLATING OPTIONS: 1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL. 2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL. 3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL. 4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																								
<table><tr><td colspan="2">DOCUMENT STATUS</td><td>Production</td><td>RELEASE DATE</td><td>08-Jun-2026</td><td>04:36:51</td></tr></table>																				DOCUMENT STATUS		Production	RELEASE DATE	08-Jun-2026	04:36:51
DOCUMENT STATUS		Production	RELEASE DATE	08-Jun-2026	04:36:51																				
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2	1															
10		9	8	7	6	5	4	3	2																

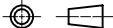
14 TO 50 CIRCUITS



VIEW FOR HEADER WITH CAP



- NOTES:
- MATERIALS:
HOUSING: 30% GF, NYLON, UL94V-0, COLOR: BLACK
PIN: 0.50mm SQ PHOSPHOR BRONZE
 - FINISHES: REFER TO PLATING OPTIONS
 - PRODUCT SPECIFICATION: PS-87831-027
 - PACKAGING SPECIFICATION: SEE PACKAGING SPECS TABLE ON SHEET 1
 - MATES WITH: A. MOLEX CRIMP RECEPTACLE HOUSING: 51110 SERIES AND CRIMP TERMINAL: 50394 SERIES
B. MOLEX 2mm MILLIGRID DUAL ROW IDT: 87568 SERIES
C. MOLEX 2mm MILLIGRID DUAL ROW RECEPTACLE: 79107 (GOLD PLATED), 78787 (TIN PLATED)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
DIMENSION UNITS		SCALE		CURRENT REV DESC: Adding New Part Numbers				molex MILLIGRID 2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER				
mm	NTS											
GENERAL TOLERANCES (UNLESS SPECIFIED)												
	MM	INCH	EC NO: CO-000042098 DRWN: Meghraj Boodagatti 22-Apr-2026 CHK'D: Meghraj Boodagatti 08-Jun-2026 APPR: Saravanakumar Murugesan 08-Jun-2026				PRODUCT CUSTOMER DRAWING					
4 PLACES	± 0	± 0										
3 PLACES	± 0	± 0										
2 PLACES	± 0.2	± 0										
1 PLACE	± 0	± 0										
0 PLACES	± 0	± 0										
ANGULAR TOL ± 3°				INITIAL REVISION: DRWN: GMENARLY 2015/04/15 APPR: KHLIM 2015/06/29				DOCUMENT NUMBER SD-87831-0001		DOC TYPE PSD	DOC PART 001	REVISION A25
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION 		DRAWING A3-SIZE	SERIES 87831	MATERIAL NUMBER SEE TABLE		CUSTOMER GENERAL MARKET		SHEET NUMBER 9 OF 14		

10	9	8	7	6	5	4	3	2	1											
14 TO 20 CIRCUITS																				
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION								
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H	
14	87831-1419	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	12.00	14.85	16.65	15.00	8.00	N.A	2.50	3.60±0.20	
	87831-1420	87831-1430	87831-5554	N.A	2															
	87831-1421	87831-5530	87831-5560	N.A	3															
	87831-1436	N.A	N.A	N.A	4															
	87831-1428	N.A	87831-5564	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-1429	N.A	87831-5563	N.A	3															
	87831-1435	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES									3.50
	87831-1410	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A									
87831-1411	N.A	N.A	N.A	3																
16	87831-1619	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	14.00	16.85	18.65	17.00	10.00	N.A	2.50	3.60±0.20	
	87831-1620	N.A	N.A	N.A	2															
	87831-1621	N.A	N.A	N.A	3															
	87831-1636	N.A	N.A	N.A	4															
	87831-1628	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-1629	N.A	87831-5559	N.A	3															
	87831-1635	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50		
18	87831-1819	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	16.00	18.85	20.65	19.00	12.00	N.A	2.50	3.60±0.20	
	87831-1820	N.A	87831-5566	87831-1830	2															
	87831-1821	N.A	N.A	N.A	3															
	87831-1836	N.A	N.A	N.A	4															
	87831-1828	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-1829	N.A	N.A	N.A	3															
20	87831-2019	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	18.00	20.85	22.65	21.00	14.00	N.A	2.50	3.60±0.20	
	87831-2020	N.A	N.A	87831-2050	2															
	87831-2021	N.A	N.A	N.A	3															
	87831-2036	N.A	N.A	N.A	4															
	87831-2028	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-2029	N.A	N.A	N.A	3															
	87831-2035	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50		
	87831-2010	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50		
	87831-2011	N.A	87831-2041	87831-2051	3															
PLATING OPTIONS:																				
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																				
DOCUMENT STATUS		Production	RELEASE DATE		08-Jun-2026	04:36:51														
		9	8		7		6		5		4		3		2		1			
FORMAT: Molex-aga-master-ib-prod-A3 REVISION: E1 DATE: 2021/05/01		9	8		7		6		5		4		3		2		1			

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES (UNLESS SPECIFIED)

	MM	INCH
4 PLACES	± 0	± 0
3 PLACES	± 0	± 0
2 PLACES	± 0.2	± 0
1 PLACE	± 0	± 0
0 PLACES	± 0	± 0
ANGULAR TOL	± 3 °	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A25

PRODUCT CUSTOMER DRAWING

MILLIGRID

2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

10 OF 14

10		9		8		7		6		5		4		3		2		1		
22 TO 30 CIRCUITS																				
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION								
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H	
22	87831-2219	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	20.00	22.85	24.65	23.00	16.00	N.A	2.50	3.60±0.20	
	87831-2220	N.A	N.A	N.A	2															
	87831-2221	N.A	N.A	N.A	3															
	87831-2236	N.A	N.A	N.A	4															
	87831-2228	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-2229	N.A	N.A	N.A	3															
24	87831-2419	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	22.00	24.85	26.65	25.00	18.00	N.A	2.50	3.60±0.20	
	87831-2420	N.A	N.A	87831-7420	2															
	87831-2421	N.A	N.A	N.A	3															
	87831-2436	N.A	N.A	N.A	4															
	87831-2428	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-2429	N.A	N.A	N.A	3															
	87831-2435	N.A	N.A	N.A	3															
	87831-2445	N.A	N.A	N.A	3															
	87831-2410	N.A	N.A	N.A	2													YES		N.A
26	87831-2619	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	24.00	26.85	28.65	27.00	20.00	N.A	2.50	3.60±0.20	
	87831-2620	87831-2630	87831-5555	N.A	2															
	87831-2621	N.A	N.A	N.A	3															
	87831-2636	N.A	N.A	N.A	4															
	87831-2628	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-2629	N.A	N.A	N.A	3															
	87831-2610	N.A	N.A	N.A	2															YES
28	87831-2819	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	26.00	28.85	30.65	29.00	22.00	N.A	2.50	3.60±0.20	
	87831-2820	N.A	N.A	N.A	2															
	87831-2821	N.A	N.A	N.A	3															
	87831-2836	N.A	N.A	N.A	4															
	87831-2828	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-2829	N.A	N.A	N.A	3															
30	87831-3019	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	28.00	30.85	32.65	31.00	24.00	N.A	2.50	3.60±0.20	
	87831-3020	N.A	N.A	N.A	2															
	87831-3021	N.A	N.A	N.A	3															
	87831-3036	N.A	N.A	N.A	4															
	87831-3028	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50		
	87831-3029	N.A	N.A	N.A	3															
	87831-3035	N.A	N.A	N.A	3															
	87831-3037	N.A	N.A	N.A	3															
	87831-3010	87831-3030	87831-3050	N.A	2													YES		N.A
PLATING OPTIONS:																				
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																				
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																				
DOCUMENT STATUS		Production	RELEASE DATE		08-Jun-2026		04:36:51													
		9		8		7		6		5		4		3		2		1		

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	MM	INCH
4 PLACES	± 0	± 0
3 PLACES	± 0	± 0
2 PLACES	± 0.2	± 0
1 PLACE	± 0	± 0
0 PLACES	± 0	± 0
ANGULAR TOL	± 3 °	

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

87831

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

11 OF 14

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A25

FORMAT: Mol-jpgs-master-db-prod-A3

REVISION: E1

DATE: 2021/05/01

10	9	8	7	6	5	4	3	2	1												
32 TO 40 CIRCUITS																					
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATION	PEG	DIMENSION										
					DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H			
32	87831-3219	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	30.00	32.85	34.65	33.00	26.00	N.A	2.50	3.60±0.20			
	87831-3220	N.A	N.A	2																	
	87831-3221	N.A	N.A	3																	
	87831-3236	N.A	N.A	4																	
	87831-3228	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50				
	87831-3229	N.A	N.A	3																	
34	87831-3419	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	32.00	34.85	36.65	35.00	28.00	N.A	2.50	3.60±0.20			
	87831-3420	N.A	N.A	2																	
	87831-3421	N.A	N.A	3																	
	87831-3436	N.A	N.A	4																	
	87831-3428	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50				
	87831-3429	N.A	N.A	3																	
	87831-3435	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50				
36	87831-3619	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	34.00	36.85	38.65	37.00	30.00	N.A	2.50	3.60±0.20			
	87831-3620	N.A	87831-5564	2																	
	87831-3621	N.A	N.A	3																	
	87831-3636	N.A	N.A	4																	
	87831-3628	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50				
	87831-3629	N.A	N.A	3																	
38	87831-3819	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	36.00	38.85	40.65	39.00	32.00	N.A	2.50	3.60±0.20			
	87831-3820	N.A	N.A	2																	
	87831-3821	N.A	N.A	3																	
	87831-3836	N.A	N.A	4																	
	87831-3828	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50				
	87831-3829	N.A	N.A	3																	
40	87831-4019	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	38.00	40.85	42.65	41.00	34.00	N.A	2.50	3.60±0.20			
	87831-4020	N.A	N.A	2																	
	87831-4021	N.A	N.A	3																	
	87831-4036	N.A	N.A	4																	
	87831-4028	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50				
	87831-4029	N.A	N.A	3																	
	87831-4010	N.A	N.A	2	YES	N.A	YES	N.A	YES	N.A							3.50				
PLATING OPTIONS:																					
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																					
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																					
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																					
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																					
DOCUMENT STATUS		Production	RELEASE DATE	08-Jun-2026	04:36:51																
FORMAT: Molex-aga-master-ib-prod-A3 REVISION: E1 DATE: 2021/05/01		9	8	7	6	5	4	3	2	1											

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES (UNLESS SPECIFIED)

	MM	INCH
4 PLACES	± 0	± 0
3 PLACES	± 0	± 0
2 PLACES	± 0.2	± 0
1 PLACE	± 0	± 0
0 PLACES	± 0	± 0
ANGULAR TOL	± 3 °	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE

PSD

DOC PART

001

REVISION

A25

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

12 OF 14

A3-SIZE

87831

10	9	8	7	6	5	4	3	2	1																																								
42 TO 50 CIRCUITS																																																	
CKT SIZE	ASSY P/N WITHOUT CAP IN TUBE	ASSY P/N WITH CAP IN TUBE	ASSY P/N WITH CAP IN T&R	ASSY P/N WITHOUT CAP IN T&R	PLATING OPTIONS	FRICTION LOCKS		SIDE SLOTS		CENTER POLARIZATI ON	PEG	DIMENSION																																					
						DUAL	CENTER	DUAL	SINGLE			A	B	C	D	E	F	G	H																														
42	87831-4219	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	40.00	42.85	44.65	43.00	36.00	N.A	2.50	3.60±0.20																														
	87831-4220	N.A	N.A	87831-4230	2																																												
	87831-4221	N.A	N.A	N.A	3																																												
	87831-4236	N.A	N.A	N.A	4																																												
	87831-4228	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50																															
	87831-4229	N.A	N.A	N.A	3																																												
44	87831-4419	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	42.00	44.85	46.65	45.00	38.00	N.A	2.50	3.60±0.20																														
	87831-4420	N.A	N.A	N.A	2																																												
	87831-4421	N.A	N.A	N.A	3																																												
	87831-4436	N.A	N.A	N.A	4																																												
	87831-4428	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50																															
	87831-4429	N.A	N.A	N.A	3																																												
	87831-4435	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50																															
46	87831-4619	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	44.00	46.85	48.65	47.00	40.00	N.A	2.50	3.60±0.20																														
	87831-4620	N.A	N.A	N.A	2																																												
	87831-4621	N.A	N.A	N.A	3																																												
	87831-4636	N.A	N.A	N.A	4																																												
	87831-4628	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50																															
	87831-4629	N.A	N.A	N.A	3																																												
48	87831-4819	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	46.00	48.85	50.65	49.00	42.00	N.A	2.50	3.60±0.20																														
	87831-4820	N.A	N.A	N.A	2																																												
	87831-4821	N.A	N.A	N.A	3																																												
	87831-4836	N.A	N.A	N.A	4																																												
	87831-4828	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50																															
	87831-4829	N.A	N.A	N.A	3																																												
50	87831-5019	N.A	N.A	N.A	1	YES	N.A	YES	N.A	YES	N.A	48.00	50.85	52.65	51.00	44.00	N.A	2.50	3.60±0.20																														
	87831-5020	N.A	N.A	N.A	2																																												
	87831-5021	N.A	N.A	N.A	3																																												
	87831-5036	N.A	N.A	N.A	4																																												
	87831-5028	N.A	N.A	N.A	2	YES	N.A	YES	N.A	YES	YES							2.50																															
	87831-5029	N.A	N.A	N.A	3																																												
	87831-5035	N.A	N.A	N.A	3	YES	N.A	YES	N.A	YES	YES							3.50																															
PLATING OPTIONS:																																																	
1 - 0.05-0.13µm/2-5µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																																																	
2 - 0.38µm/15µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																																																	
3 - 0.76µm/30µin GOLD IN CONTACT AREA AND 1.88µm/75µin MIN. MATTE TIN IN SOLDER TAIL AREA OVER 1.27µm/50µin MIN. NICKEL OVERALL.																																																	
4 - 2.50µm/100µin MIN. MATTE TIN OVER 1.25µm/50µin MIN. NICKEL OVERALL.																																																	
A																																																	
DOCUMENT STATUS Production RELEASE DATE 08-Jun-2026 04:36:51																																																	
9										8					7					6					5					4					3					2					1				

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	MM	INCH
4 PLACES	± 0	± 0
3 PLACES	± 0	± 0
2 PLACES	± 0.2	± 0
1 PLACE	± 0	± 0
0 PLACES	± 0	± 0
ANGULAR TOL ± 3 °		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

THIRD ANGLE PROJECTION

DRAWING
A3-SIZE

SERIES
87831

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti 22-Apr-2026

CHK'D: Meghraj Boodagatti 08-Jun-2026

APPR: Saravanakumar Murugesan 08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY 2015/04/15

APPR: KHLIM 2015/06/29

DOCUMENT NUMBER

SD-87831-0001

DOC TYPE
PSD

DOC PART
001

REVISION
A25

PRODUCT CUSTOMER DRAWING

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

13 OF 14

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS

mm

SCALE

NTS

GENERAL TOLERANCES (UNLESS SPECIFIED)

	MM	INCH
4 PLACES	± 0	± 0
3 PLACES	± 0	± 0
2 PLACES	± 0.2	± 0
1 PLACE	± 0	± 0
0 PLACES	± 0	± 0
ANGULAR TOL	± 3 °	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098

DRWN: Meghraj Boodagatti

CHK'D: Meghraj Boodagatti

APPR: Saravanakumar Murugesan

22-Apr-2026

08-Jun-2026

08-Jun-2026

INITIAL REVISION:

DRWN: GMENARLY

APPR: KHLIM

2015/04/15

2015/06/29

SD-87831-0001

PSD

001

A25

DOCUMENT NUMBER

DOC TYPE

DOC PART

REVISION

2MM PITCH, THROUGH HOLE VERTICAL SHROUDED HEADER

PRODUCT CUSTOMER DRAWING

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

SEE TABLE

GENERAL MARKET

13 OF 14

THIRD ANGLE PROJECTION

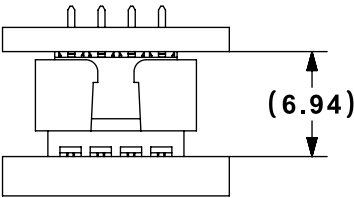
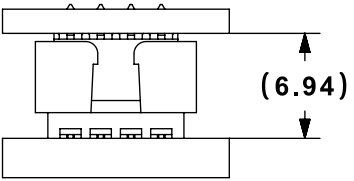
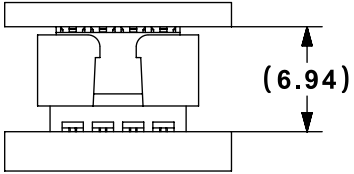
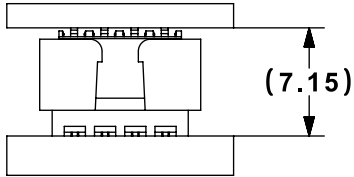
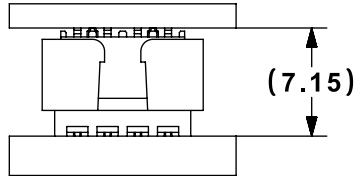
DRAWING

SERIES

A3-SIZE

87831

BOARD TO BOARD (BTB) DISTANCE

HEADER	MATES WITH (RECEPTACLE)	BTB DIST.	PICTORIAL VIEW
87831	79107	6.94	
	78787	6.94	
	79108	6.94	
	79109	7.15	
	78788	7.15	

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS		SCALE	
mm		NTS	
GENERAL TOLERANCES (UNLESS SPECIFIED)			
	MM	INCH	
4 PLACES	± 0	± 0	
3 PLACES	± 0	± 0	
2 PLACES	± 0.2	± 0	
1 PLACE	± 0	± 0	
0 PLACES	± 0	± 0	
ANGULAR TOL		± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	

CURRENT REV DESC: Adding New Part Numbers

EC NO: CO-000042098
DRWN: Meghraj Boodagatti
CHK'D: Meghraj Boodagatti
APPR: Saravanakumar Murugesan

22-Apr-2026
08-Jun-2026
08-Jun-2026

INITIAL REVISION:
DRWN: DRWN BY
APPR: APPR BY

XXXX/XX/XX
XXXX/XX/XX

DOCUMENT NUMBER
SD-87831-0001

DOC TYPE
PSD

DOC PART
001

REVISION
A25

SHEET NUMBER
14 OF 14

A3-SIZE

87831

MATERIAL NUMBER

CUSTOMER

GENERAL MARKET